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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: James F. Bredt et al.  
Serial No: 09/706,350  
Filed: November 3, 2000  
For: MATERIAL SYSTEMS AND METHODS OF THREE-  
DIMENSIONAL PRINTING  
Art Unit: 1742



**CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

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*Patricia A. Nadeau*  
Signature

Commissioner for Patents  
Washington, D.C. 20231

**PRELIMINARY AMENDMENT**

Sir:

Please amend the above-identified application as follows

In the Claims

Please cancel claims 12-20, 43-54, 61-72, 78-84, 106-111 and 113-114.

Please rewrite claims 1, 21, 27-30, 55, 57, 59, 73, 85, 93, 112 and 115 as follows.

- A
1. (Amended) A method of three-dimensional printing, comprising:  
providing a first layer of free-flowing particulate material comprising an ionic reactant;  
dispensing a homogeneous fluid onto a first region of the first layer, the fluid comprising an ionic reactant and the first region being contiguous with a second region comprising the free-flowing particulate material;  
allowing an ion exchange reaction to occur between the particulate reactant and the reactant in the fluid, the reaction causing a solidified material to form in the first region;